

Remarks/Arguments

Reconsideration of this application is requested.

RCE and Extension of Time

In response to the final Office Action mailed on April 12, 2006, requests for continued examination and a one month extension of time are enclosed. Since August 12, 2006 was a Saturday, the extended period for response expires on August 14, 2006.

Claim Status

Claims 1-30 are pending. Claim 30 is amended.

Allowable Subject Matter

The indication of allowable subject matter in claim 30 is noted and appreciated. Claim 30, which depends directly from claim 1, is amended into independent form to include all limitations of claim 1. Accordingly, claim 30 is now in condition for allowance.

Claim Rejections

Claims 1-29 are rejected under 35 USC 103(a) as obvious over Kubo (US 4,896,349) in view of Fawal (US 6,452,938) and Yamano (US 6,597,768). For the reasons discussed below, applicant respectfully traverses the rejections.

Each of independent claims 1, 10, 17 and 23 requires a first filter coupled between a first output coil and a first transceiver circuit (i.e. an ADSL codec), wherein the first output coil passes the entire input signal but the first filter allows only a first range of frequencies (ADSL) to pass through to the first transceiver circuit. Likewise, a second filter is coupled between a second output coil and a second transceiver circuit (LAN codec), wherein the second output coil passes the entire input signal but the second filter allows only a second range of frequencies (LAN) to pass through to the second transceiver circuit.

The Action concedes that Kubo fails to teach first and second filters configured between first and second output coils to pass, respectively, ADSL and

LAN frequency ranges, but suggests that Yamano fills this gap. The Action states, at pages 3-4, that:

Yamano teaches a transformer circuit, coupled to a codec, where the codec may be a DSL modem (i.e. ADSL) that works in the frequency range of 26 kHz-1.1 MHz; and also, coupled to a phone line network transceiver (i.e. LAN or home LAN) that works in the frequency range of 4.0 MHz-10.0 MHz.

The only circuit disclosed by Yamano as including a transformer is bandpass filter/magnetics circuit 140 (Figs. 11 and 12b), which is a component of phone line networking transceiver 130 and includes transformer T1. Transformer T1 might be interpreted as being coupled on one side, via analog front end (AFE) 142 and transceiver modem interface 144, to codec 154. However, applicant cannot understand how the Action considers transformer T1 to also be coupled to a phone line networking transceiver, *since it is itself a component of* phone line networking transceiver 130.

The only components shown by Yamano as being coupled between phone line networking transceiver 130 and a codec are inductors 140a, b (FIG. 8) and 200, 202 (FIGS. 10, 11), which are not transformer circuits. Applicant can only assume that the Action interprets RJ-11 jack 134 as being a phone line networking transceiver. If applicant is incorrect in this regard, applicant respectfully requests clarification as to how transformer T1 of Fig. 12b, the only transformer disclosed by Yamano, is coupled on one side to a codec and on another side to a phone line network transceiver.

Yamano is deficient in many respects, and lacks disclosure or suggestion of any structure to remedy the deficiencies of Kubo. The coils on the two coil side of transformer T1 are coupled to transmit TX line and receive RX line of analog front end (AFE) 140. AFE 140, in turn, is coupled to transceiver modem interface 144, which is coupled to voiceband modem codec IC 154. Thus, the two coils of the two

coil side of transformer T1 are coupled to the same transceiver circuit (codec IC 154), and not to separate first (ADSL) and second (LAN) transceiver circuits as is required by applicant's claims. Moreover, the two coils on the two coil side of transformer T1 are not "output" coils, as required by applicant's claims. Instead, one is a transmit (output) coil while the other is a receive (input) coil.

Not only does Yamano lack two output coils coupled to two transceiver circuits, as required by applicant's claims, it also lacks first and second bandpass filters configured between those coils and transceiver circuits. The only filter disclosed in Yamano as coupled to a transformer is bandpass filter 141, which is coupled to the one coil side of transformer T1 to RJ-11 jack 134. Nowhere does Yamano disclose or suggest a configuration such as applicant's. The mere fact that Yamano discloses that LANs and ADSLs may utilize different frequency ranges (Fig. 2) does not remedy this deficiency.

In sum, the Action concedes that Kubo fails to disclose first and second filters coupled between first and second transceiver circuits (LAN and DSL codecs) and first and second output coils of a transformer circuits, but asserts that Yamano remedies this deficiency. This is clearly not correct, because Yamano's transformer has a completely different configuration from that of Kubo and from that of applicant. It performs a completely different function, and cannot and does not provide the features missing from Kubo. Fawal, the other ancillary reference, is cited for its disclosure of an integrated transformer and also does not remedy the deficiencies of Kubo. For these reasons, the rejections of claims 1-29 under 35 USC 103(a) should be withdrawn.

Conclusion

This application is now believed to be in condition for allowance. The Examiner is urged to telephone the undersigned to resolve any issues that remain after entry of this amendment.


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Amdt. dated August 14, 2006
Reply to Office Action of April 12, 2006

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Any fees due with this response may be charged to our Deposit Account No.
50-1314.

Respectfully submitted,
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